

# MANUFACTURERS' RECORD

A WEEKLY REVIEW OF THE IRON, STEEL, METAL & HARDWARE TRADES.

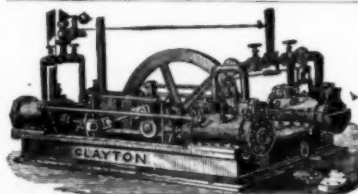
AND A MANUFACTURING AND TEXTILE PAPER, DEVOTED TO THE UPBUILDING OF SOUTHERN MANUFACTURES AND THE DEVELOPMENT OF THE MATERIAL RESOURCES OF THE SOUTH.

WEEKLY.  
\$3.00 PER YEAR.

BALTIMORE, MAY 24, 1884.

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VOL. V. No. 15.

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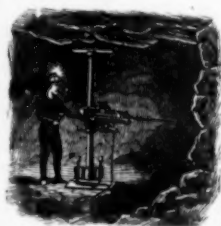
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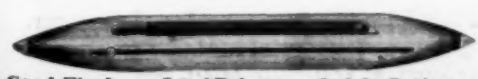
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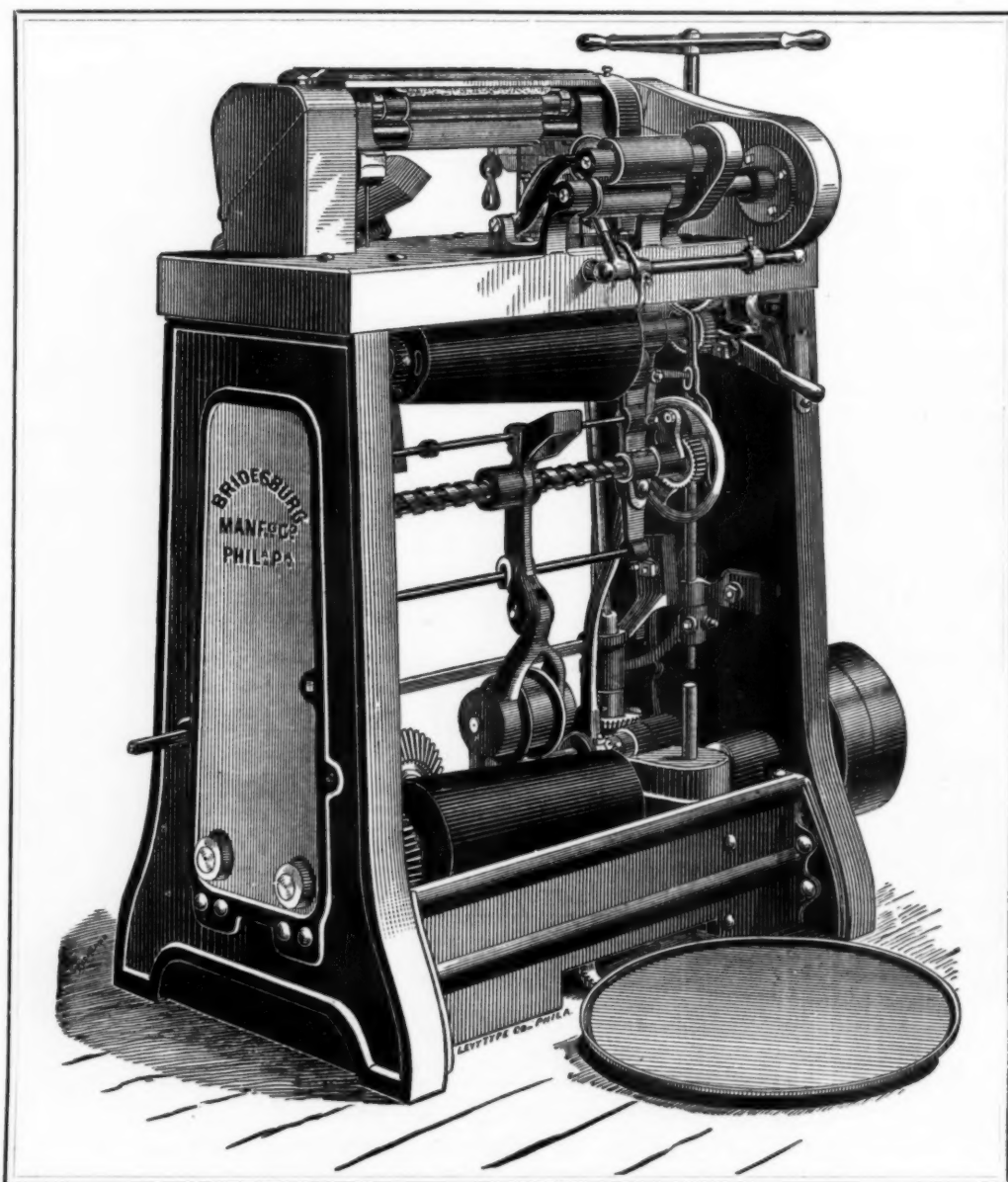
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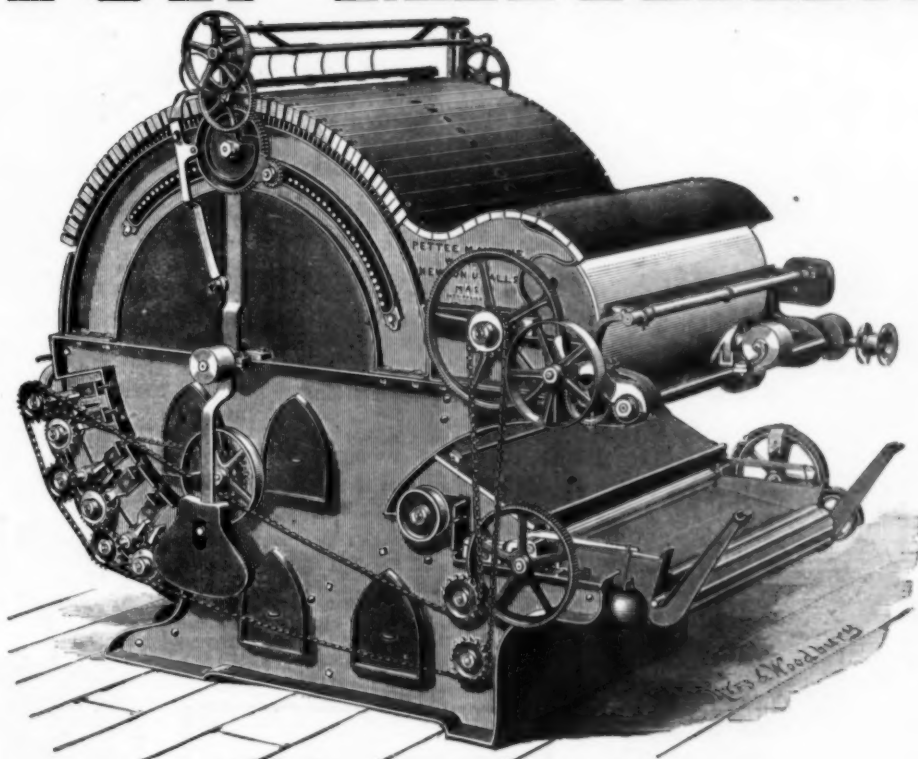
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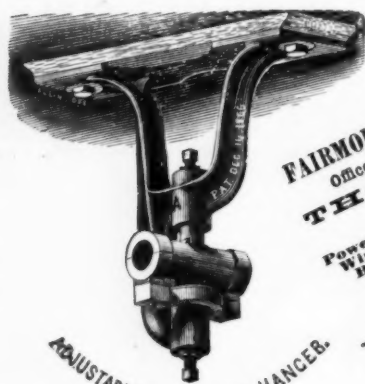
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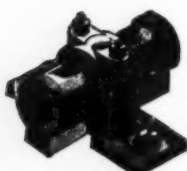
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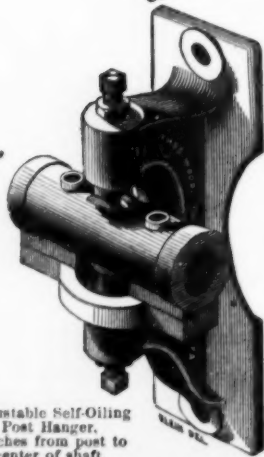
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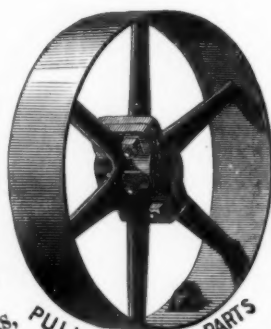
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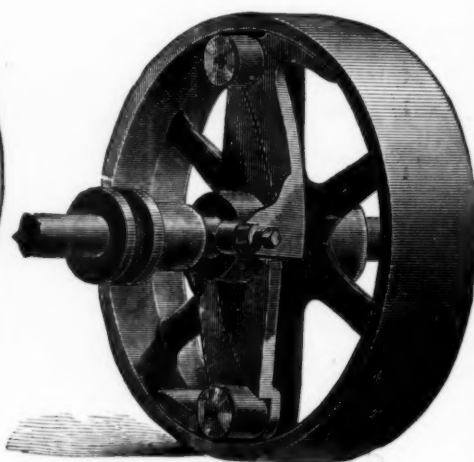
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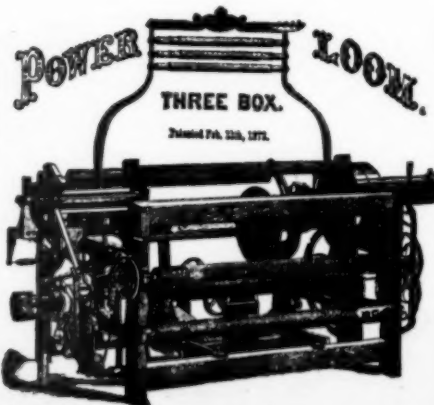
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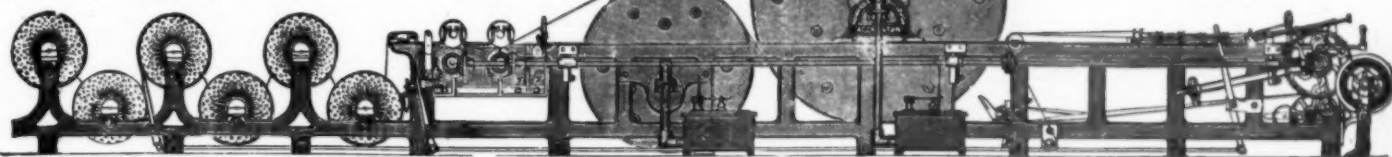
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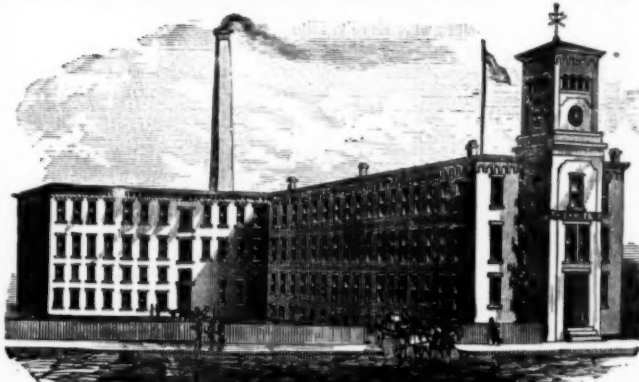
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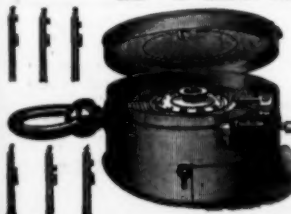
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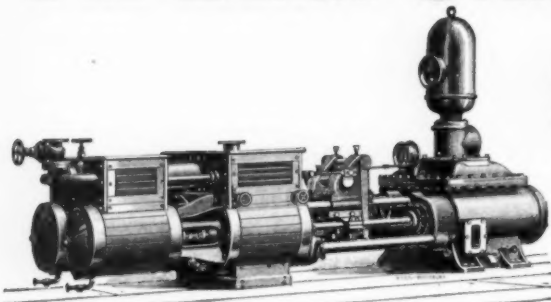
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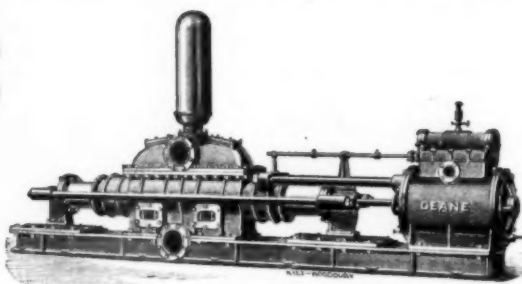
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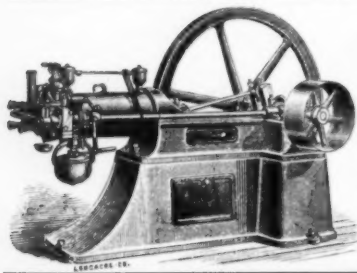
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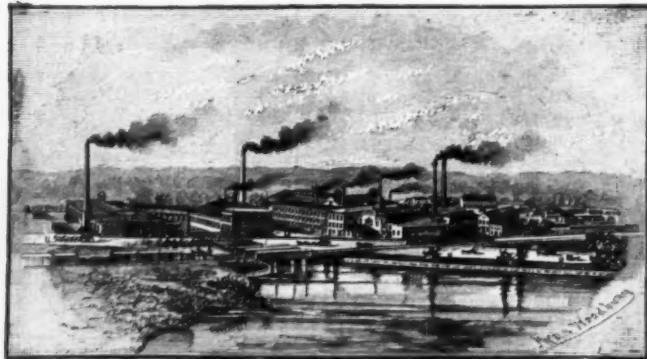
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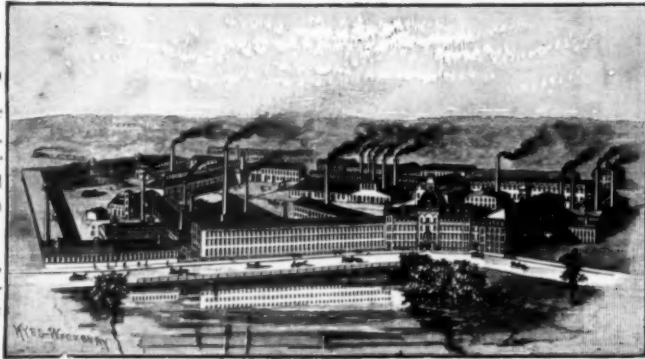
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BALTIMORE, MAY 24, 1884.

OUR Atlanta correspondent, Mr. Avery, in his letter published to day, gives additional details of the wonderful sale of land at Sheffield. That men should stand out in an open corn field, with not a house in sight, and pay \$270,000 for 30 acres of land, or \$9,000 an acre for what cost only \$20 an acre six months ago, is indeed a remarkable occurrence. The founding of this town will undoubtedly lead many others to attempt to imitate the Gordons; in fact, they are doing it now all over the South, though on a somewhat smaller scale. The development now in progress at the South is simply marvellous, and immense fortunes are being made by many; but there must necessarily be some danger that the rush will be too rapid, and then there may come a temporary lull. When the West was being built up so rapidly, the increase in population more than kept pace with the increase in manufactures; but at the South this is not so. Still it may for a while be almost as well that immigration is not very active, as there have been many thousands of idle hands at the South that are now finding employment in the mills and factories that are going up, and instead of being a burden upon the entire South are adding to its productive wealth. As the entire native population of the South thus becomes more fully employed, there will be a greater demand for laborers from elsewhere, and then we will doubtless see a decided increase in the number of farmers, mechanics and general laborers seeking homes in that section.

MR. R. N. ROBBINS, of Huntington, W. Va., whose letter reporting the discovery of extensive tin mines, as well as other minerals, upon his land in West Virginia, was published in our last issue, writes that "on the 15th of April I had an assay of the tin stone made, which produced 15 per cent. of tin, beside some quicksilver—about 10 per cent. \* \* We have five coal fields on our lands, equal to the Pittsburgh coal, from 4 to 6 feet veins. We shall open them soon."

## The Outlook for Business.

The flurry in Wall street, which at one time threatened the business interests of the entire country, has apparently proved to be only a stock panic, confined almost wholly to those who have been betting on prices. With this danger averted, we are better able to gain some idea as to the present prospects for future business; though, of course, something may arise to cause an unexpected change. For several years business has been settling down to what seems to be a sound basis. Over-production in manufactures has almost, if not entirely, ceased, and the stocks of manufactured goods from pig iron to calico are not so large but that an increased demand would soon show that stocks are not excessive, and an advance in prices would almost surely follow. Consumers of dry goods, as well as of pig iron and all other articles, have purchased only to meet their immediate requirements, and in many cases wear and tear has been going on,—in railroad rolling stock, for instance,—without being counterbalanced by new purchases. The consumptive wants of the country are, therefore, large, and under favorable conditions these wants will be supplied.

With business of all kinds good, we would soon see our factories crowded with work to meet the demands upon them. The conditions are therefore favorable for an improvement in trade, provided the agricultural interests, upon which so much depends, are prosperous.—Looking to the South we find that the people of that section are turning their attention more and more to the production of foodstuffs. The acreage in wheat in the Southern States this year is 750,000 acres more than last year, and the indications point to a most excellent crop soon to be harvested. We think it probable that the Southern States will produce more wheat this year than ever before. The oat crop promises a fair yield, while fruits will be abundant; early vegetables will add many hundreds of thousands of dollars this year to the wealth of the South. The area in corn will, we think, be larger than last year, and in cotton there will hardly be any decrease in acreage. In other sections the crop outlook is equally promising, and, with favorable weather from now till harvest time, we will probably gather the largest wheat crop ever produced in this country. Should these indications be fulfilled, business would necessarily receive a decided impetus, and the fall of 1884 would almost surely witness a marked improvement all along the line.

THE Clifton Cotton Mill, at Clifton, S. C., running 21,000 spindles, earned 14 per cent. net during the past year, as shown by the report made to the directors at their annual meeting May 13. The company decided to add 3,000 more spindles.

## Old Towns Against New Towns.

The remarkable success which has thus far attended the company that located the new town of Sheffield has attracted such general attention that there is danger of its leading to too many enterprises of the same kind. The founding of towns is a business that is by no means always successful. Even in the West, where immigration has been so active for many years, and where town-building has been one of the features of the progress of that section, immense sums have been lost in trying to start new towns. Many of these projects are successful, but probably nearly an equal number prove failures. There are numerous excellent locations in the South for building up manufacturing towns, and we expect to see many prosperous cities grow up in such places; but it seems to us that the time has come for much caution in this line of work. The South is dotted over with hundreds of villages, towns and cities having every advantage that these newer places possess, but which have not yet fully felt the influence of the new order of things. These places offer not only advantages for manufactures, equally as great as can be found in the new towns, but to these they add the benefits of a well-established order of business, society, schools, churches and other privileges that can only come gradually where a town has to be built up from the very foundation. In such towns property can generally be purchased at very moderate prices,—far cheaper, in fact, than at Sheffield,—and the chances for making money by the increased value of real estate are just as safe as in any town that is yet to be built.

If the business men of the Southern towns that are not keeping up with the general development of the South would display the same energy in advancing the interests of their own cities, and thus necessarily enriching themselves, as has been shown by those who have so successfully worked up the Sheffield project, there would be perhaps not a boom, but a steady and rapid growth of hundreds of places that are not now doing their part in the great work of building up the South. We would then see such cities as Norfolk, Petersburg, Charlottesville, Wilmington, Charleston, Savannah, Montgomery, and many others, rivalling Atlanta's push and energy. Co-operation is, of course, necessary for success in this line of work, and faith in the future of a town is also essential to earnest efforts in its behalf. We invite the attention of Southern people to this matter, believing that in carrying out these suggestions they will meet with great success. Let it be remembered that if you wish outside capital and enterprise to come into your town, you must first give evidence that you and your fellow-citizens are energetic, pushing men.

☞ Subscribe to the Baltimore Manufacturers' Record. Price, \$3 per year.

## The Proposed Baltimore Exhibition.

At last the way is open for working up an exhibition in Baltimore some time in the not very distant future. The trustees who were elected about two years ago to devise ways and means for holding a grand exhibition in this city have at last adjourned *sine die*. They utterly failed to carry out the work, and only succeeded in bringing before the community a project that was absolutely without merit—a project which would have required the expenditure of not less than \$1,500,000 upon a building near the centre of the city and in which the exhibition space would not have been much larger than the boiler rooms alone at the Louisville exhibition. A more complete waste of time than that given to this work can scarcely be imagined. Instead of planning for a large exhibition at a comparatively small cost, according to the views of those who selected them for this purpose, they tried to have a very small "baby show," as one gentleman expressed it, at an enormous cost. Had they met the proposals of the Cotton Planters' Association in the proper spirit, Baltimore might to-day be preparing for that magnificent world's fair for which New Orleans is now getting ready; but they wasted this opportunity, as well as all others that were offered to them. The blame for their failure is said to be upon the business men of Baltimore, who refused to subscribe to the enterprise; but the blame should be upon those who attempted to bleed this city of \$1,500,000 for a nondescript building to be erected upon land that was to cost about double its value. Truly the business men of Baltimore displayed good sense in refusing to help out such a scheme. We persistently pointed out the folly of this plan, and we rejoice that it is dead.

So long as this project was before the people of the city it was useless to attempt to get up a legitimate exhibition scheme. Now that it is out of the way, there is hope for the future. Mr. Geo. R. Skillman, one of the trustees, who persistently opposed the ridiculous plans adopted by the majority, is still in favor of a grand exhibition; and now that he is free from all encumbrances, we trust that he will carry out his original views, and demonstrate that a grand exhibition can be held in Baltimore.

PRESIDENT Fallis, of the Eureka Iron Co., Oxmoor, Ala., says that counting the interest on the capital invested, and for wear and tear of machinery, &c., it costs his company \$11 a ton to make pig iron.

Our readers will confer a favor upon our advertisers and upon us, as well as benefit themselves, if, whenever they write to anyone advertising in this paper, if it is only for a catalogue, they mention that "your advertisement was seen in the BALTIMORE MANUFACTURERS' RECORD." A careful compliance with this request will be much appreciated.

## The Wonder of the Age.

A Corn Field at \$9,000 an Acre.

SOUTHERN DEPARTMENT  
BALTIMORE MANUFACTURERS' RECORD,  
ATLANTA, GA., May 17, 1884.

I do not know of anything more remarkable than the success of the new town of Sheffield, in Alabama. It is the phenomenal Southern creation in the shape of an embryo city. It reads like romance.

The conceivers of the scheme were the Gordon Brothers—Walter and Eugene. Amid the hosts of new places that have been called into existence in the South in the rushing current of development and prosperity that has lately been sweeping over her, none are more extraordinary than this Sheffield. The site was an old farm on a high bluff on the Tennessee river and in the woods. The young Gordons, who made fortunes out of the Georgia Pacific Railroad, originated this idea of the new place, in the midst of coal and iron, on a great water-course and near great railway trunk lines.

They bought the farm of 2,800 acres for \$20 an acre, or a total of \$56,000. They put \$5,000 of work on the land in grading and laying off a set of prospective streets. And in four months they have sold at public sale to men from all parts of the country 30 acres of the 2,800 for the enormous sum of \$273,000, or \$9,000 an acre; and this has been done without the erection of a building.

Surely this is the very culmination of town-manufacturing. Of all the new industries so vigorous and lively in the South, none can beat that of making towns. And it looks as if this last manufacture has been the quickest, most daring and complete project yet.

The method of doing this was a model of its kind. The Gordons put the stock at \$100,000, and put in their land they had bought for about half. They then arranged all the details of the scheme. They quietly canvassed among their friends, and limited the subscriptions to Atlanta, Montgomery, and one or two other places. The stock was taken immediately, and could have been trebled in a short while. The scheme was then enlarged. The East Tennessee, Virginia & Georgia Railroad people were brought into it, and agreed to build a branch road. The company sent some scouts out to report on the project, and liked it so well that a company with \$1,000,000 capital was organized to construct the railroad to Sheffield, crossing the Memphis & Charleston road, and extending on to Birmingham. The company have the privilege of buying one third of the original stock at par, and now own \$42,000 of the stock. The stock was enlarged to half a million, and is selling on that basis. That is, the stock that the original subscriber paid \$1 for he can sell for \$5. Numerous sales have been made at this figure, and \$6.25 is offered without any sellers.

The railroad has been built; the town laid off in residence avenues 100 feet wide, and business streets 60 feet. They named the avenues after our Southern cities, and the streets 1st, 2d, 3d, &c. Building lots were set apart for every kind of church, for public schools, and all needed public buildings. A site has been donated for a hotel. The business lots were made 25 by 125 feet, with 16-foot alleys behind, and residence lots 50 by 200 feet.

The project was liberally advertised, and on the day of the sale 3,000 men attended. They came from North, South, East and West. An English capitalist from London bought \$10,000 worth of lots. Every State in the Union was represented, and also Canada.

There was never anything like the bidding on these vacant lots in the woods. The first lot sold brought \$1,000. One lot

sold for \$1,525. A triangular lot, 141 by 120 feet, brought the amazing sum of \$8,900. Residence lots sold from \$1,000 to \$3,000. The hotel block is now worth, according to the present valuation, more than the hotel the hotel company agreed to put up. The Sheffield Land Company, of Mobile, put \$50,000 in lots, and will spend \$50,000 in improvements. Mr. Hobbler, the farmer who sold the Gordons the land, had the privilege of buying four lots at the price of adjoining lots, and has begun to erect four brick stores. Two companies have been organized in Nashville to build furnaces. From all quarters men bought lots for industrial enterprises.

The gross return of the sale was \$273,000, which the directors of the company have determined to use in building gas works, streets, water works and a furnace. There were some striking things happened. Men who bought lots the first day were offered 50 per cent. advance the second and third. Some stockholders sold out. Mr. Wm. Dickson realized \$3,300 for what had cost him \$460. Mr. J. H. Porter beat Dickson and got \$3,700 for what cost him \$660. Dr. W. Taylor sold his stock 5 for 1 one day, bought the next day \$2,500 at par and realized the day after 50 per cent. upon it.

The thing is wonderful. The solution of the success is varied. There are a multiplicity of reasons for it. There never was an enterprise better managed. Mr. Gordon made such a success of the Georgia Pacific matter that his leadership was accepted as an assurance of success. He carried the prestige of great victory and gave confidence. The project had merit in it. It was based on sound and patent considerations. The project was splendidly advertised. In addition to all this, the growing attention to Southern resources, the splendid work done by such journals as the MANUFACTURERS' RECORD, is beginning to have its harvest. The magnificent capabilities of the South are becoming known. Money is losing its fear of what has been an imaginary idea of Southern insecurity. This is but the beginning of a philosophical end.

I. W. AVERY.

## A Prosperous Mill.

At the annual meeting of the Piedmont Cotton Manufacturing Co., of Greenville, S. C., held last week, the following report of the operations of the year was submitted:

To the Stockholders:

GENTLEMEN—I beg leave to submit herewith a statement of the results of the operations of the company for the fiscal year ending March 31st, 1884, together with its financial condition at the close of the same.

The profits and expenditures for the year were as follows:

PROFITS.	
New York sales.....	\$ 34,476.93
Baltimore ".....	32,959.70
Boston ".....	13,791.53
Local ".....	16,216.35
Waste, ".....	9,091.49
Rents, ".....	2,566.50
Total gross profits.....	\$ 99,202.30
EXPENDITURES.	
Interest account.....	\$ 20,675.53
Expense ".....	4,619.32
Repairs ".....	3,980.85
Freight.....	9,072.46
Taxes.....	623.43
School.....	888.50
Library.....	36.70
Ministers.....	150.00
Other expenditures.....	295.00
Total expenditures.....	\$ 40,452.79
Net profits for the year.....	\$ 58,749.51
Deduct dividends paid July 1 and January 1.....	50,000.00
Balance carried to credit of profit and loss for the year.....	8,749.51
Amount at credit of profit and loss March 31, 1883.....	224,200.00
Balance at credit of profit and loss March 31, 1884.....	\$232,949.51
This balance is represented as follows:	
In cost of property over capital stock.....	\$210,660.08
In surplus assets over liabilities.....	22,289.43
	\$232,949.51

The capital stock paid in being \$500,000.00, and the cost of the property \$710,-

660.08, consequently the cost was \$210,660.08 more than the capital paid in. This sum was paid out of the net profits over the dividends, and the company does not now owe a dollar for its entire property.

It is a notorious fact, known to every one who has felt interest enough in it to familiarize themselves with the condition of trade, and more especially with the manufacturing interests of every kind in the whole country, that the past year has been one of unprecedented depression and unsatisfactory results. The value of the raw material and the manufactured products often approached so near each other, that the margin of profit was almost nominal. We, however, met the market, and sold our goods regularly as they were produced, and obtained for them the highest prices that similar goods brought; and while our profits were not as large as formerly, we did the best we could under the circumstances, and, in reviewing the year's operations, I fail to discover one instance where a change of our policy would have produced better results.

The quality of the goods we think has been materially improved, and the production has been largely increased during the year, the latter averaging about 92,000 lbs. per week.

The goods are very popular wherever they have been introduced, the brand being inquired for and the goods bought and kept in stock by the best merchants in the trade everywhere.

The mill, machinery and property of every kind belonging to the company are in the most perfect condition. The mill is thoroughly equipped with all modern and approved appliances for producing the largest quantity of the best quality of goods, and at the least possible cost, and it is, and has been, my policy to maintain it in the most perfect state of preservation and effectiveness.

All of which is respectfully submitted.

H. P. HAMMETT, President.

The usual semi-annual dividend of 5% was declared. It will be noticed among the list of expenses that nearly \$1,000 was paid out on account of school and library. President Hammett believes in educating and improving his operatives, and, so far as we can now remember, his company is the only one of the kind in the South that has for years supported a school for the benefit of its operatives and their children.

## West Point, Mississippi.

[From the New South.]

Most of the towns in North Mississippi have a bright future before them. The wealth and population of Aberdeen, Columbus, Macon, Okolona, Oxford and West Point will increase rapidly within the next year or two, and it is the purpose of this journal to labor earnestly to that end. We shall rejoice at the prosperity of every town in the State, and are prepared to co-operate zealously in all movements which are calculated to promote the prosperity of each. We have no respect for that spirit which would build up one town at the expense of another. There is room enough for a dozen large cities in Mississippi, and in this immediate section the citizens of each town will be to blame if they fail to keep up with the progress and improvement of the times.

We have for many years had strong faith in the future of West Point, and we believe more strongly now than ever that it is destined to become a large city—a great commercial, manufacturing and railway center, and that there is no other town in the South that presents a better field for men of capital, capacity and enterprise. In point of healthfulness, West Point is one of the most desirable places for a residence

in the South. The water is superior and abundant, an important consideration with persons seeking a new home, and the location of the town on an elevated plateau is strikingly beautiful and attractive.

Another important consideration, and one which will of itself make West Point a large commercial and manufacturing centre, is the fact that it is surrounded by the most productive of lands, which will support a dense population and whose products will naturally come to this market. The timber resources of this section are boundless and inexhaustible, and this timber is of the best quality and adapted to all manufacturing purposes. Within five years wagons, carriages, plows and other plantation implements, axe handles, buckets, etc., will be manufactured at this place in immense quantities and shipped to other sections that now supply us with these indispensable articles.

The railway facilities of West Point will soon be equal, and within a very few years they will be superior, to those of any town in the State. By the first of July next the New Orleans & Nashville Railroad will be completed to this point, which will give us direct connection with the former city—the best cotton market in the world. We already have the great Mobile & Ohio Railroad passing by our doors, and the projected road from Memphis to Columbus, which will be built within two years, will cross the above road at this place. A road from Grenada to this place will be built ultimately, and another from this point east to Vernon and Birmingham.

If the reader at a distance will take up a map of this State he will find that West Point is so situated that it must and will become a great railway centre.

And still another important consideration, which the distant reader should keep in view, is the fact that the soil in this immediate section is extremely fertile and adapted to the production of all the leading crops, and especially of vegetables, fruits, grapes, melons, etc. The small farmer will find this immediate section a paradise, where he has only to exercise prudence, foresight, enterprise and industry to become independent—to secure and enjoy the comforts and many of the luxuries of life.

The Northern men who have lately settled in this town, and who are already beginning to realize satisfactory returns from their industry and enterprise, are living examples alike of the advantages and attractions of West Point as a place of residence and business and of the kind feelings of our people towards immigrants from the North. No honest, industrious man from the North need lack for friends in this progressive town. Its citizens are almost a unit in the determination of making West Point an important city, and they know that the first step to take in the onward march of progress is to secure a steady accession of desirable immigrants from the North.

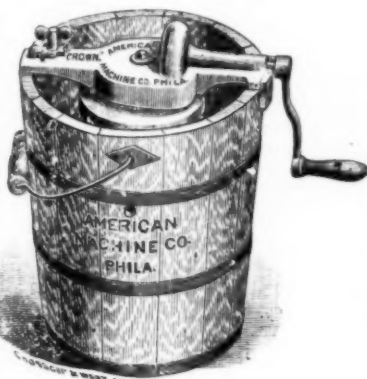
WILL some one please tell us who is backing the proposed exhibition of American manufactures in London? Is it a private enterprise, designed as a money-making scheme, and without proper financial support to begin with? Or is it under the auspices of men who can be depended upon to make it a success? Some of our exchanges are strongly commending it to the public, a thing which it is to be hoped they would not do without knowing whereof they speak. As we have previously said, the idea is a most excellent one, but before endorsing it we want to know a little more about it than we have yet learned.



### The American Machine Co.'s Ice Cream Freezers.

Prominent among the industries of Philadelphia stands the American Machine Company, whose line of specialties in household hardware has become justly celebrated, being known throughout the entire world as being unsurpassed in workmanship, material, finish, adaptability and simplicity; and we would call the attention of our readers to a few of these goods that at this season of the year meet with a large demand.

Fluting machines are made by them in four different styles: "American," "Crown," "Knox," and "Eagle," for the regular trade,



with eleven different sizes, and with fourteen different grades of rolls from coarse to fine. Hand-fluters in four different styles

The "A. M. Co.'s Clothes Wringer" has an iron frame with elliptic steel springs and the best white rubber rolls; and is made in two sizes, with rolls ten and twelve inches in length. It is claimed to be equal in every respect to any wringer in the market.

It is, however, to their line of ice-cream freezers that we would call especial attention—a line which is said to be the most complete made by any manufacturer. They make five styles: "Crown" single action, illustrated, 2-14 qts.; "American," single action, illustrated, 2-6 qts.; "Star,"



double action, 2-14 qts.; "Gem" double action, illustrated, 2-14 qts., and the "Crown," double action, for hotels and manufacturers, 8-32 qts., with either crank or fly-wheel. Among the many good points about these machines we might mention that the tub is made of the best quality cedar, and they are bound with galvanized iron hoops. The cross-bar is made of cast iron, galvanized, and is made so as to cover all the gearing so completely that nothing can get between them to interfere with the proper working of the machine. Another feature is that the parts can all be put in position ready for freezing and the ice and salt packed around the can afterward.

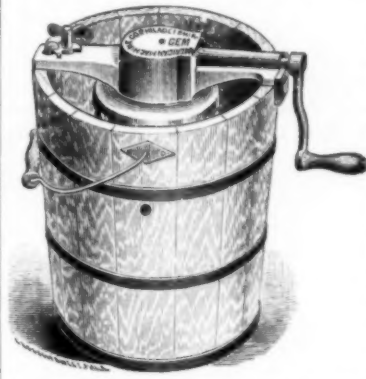
The Star and Gem and double-action Crown have two motions; the can and stirrer both revolve, but in opposite directions.

The scraper is arranged on the stirrer, so as to adjust itself to the side of the can, thereby scraping off every particle of the cream and throwing it into the center,

keeping it constantly in motion, and beating it up very smooth and light.

The Gem freezer, which is brought out this season for the first time, is the most saleable of the line, especially in the South. The space for the ice around the can has been reduced to just enough to hold what ice is necessary for freezing, thus saving considerable in ice, which is an important item in warm climates, and also reducing the cost of the freezer.

Another new article just brought out this season is the Crown Ice Chipper, shown in the cut. This is an indispensable tool to those having a freezer. By its use the ice is chipped into small and nearly uniform pieces, thereby doing away with so much



waste, as with the ordinary method. The guard projecting beyond the serrated cutting edge of the knife making it impossible to cut off thicker pieces than the space between them. Only a minute's time is



needed to reduce a 15 or 20-lb. block of ice to small pieces; and the low price brings it within the reach of every one who has a freezer.

The Baltimore agents of this company are Messrs. Moritz & Keidel, 48 and 50 German street, who carry a full line of these goods; and we would advise all who contemplate buying freezers or other goods for their own use or for their trade to correspond with them or with the company and get their catalogue and prices.

**NOTE** If you are not already a subscriber to the BALTIMORE MANUFACTURERS' RECORD, send us \$3 and you will receive it regularly for one year or six months for \$1.50.

### What is the Matter with Business?

There are very few observers of the existing industrial situation who have not made an attempt to find for it a satisfactory explanation, and it is curious to observe the differences in the opinions thus expressed. While one man charges the depression wholly to tariff agitation, another blames it upon excessive internal taxation. Others lay it to overproduction, to our need of foreign markets, to the too great manufacture of low-grade goods, to the check upon exports caused by speculations in grain, and to a dozen other causes. He would be a very bold man who would undertake to demonstrate that none of these things have exercised any influence to depress business. We are confident, for example, that the renewal in Congress of the tariff matter has inflicted direct and positive injury upon business. The cause and effect can readily be observed following each other. The uncertainty as to what Congress will do, and the consequent uncertainty as to the dimensions of prices, inevitably must make business men cautious and conservative in all their operations.

But, in examining the situation, we must not overlook the very important fact that the depression is not local in its character. It is not confined to this country. It extends over the whole civilized world. It is as extreme in England as it is here. It is felt with as much force in France, in Germany, in Belgium, in Italy, as it is in the United States. Any one who has read carefully the intelligent and accurate correspondence in our columns from Lancashire, is aware that the suffering in the British cotton manufacturing districts is much greater than it is in New England or in Pennsylvania, and France is even in a worse case. It is evident, therefore, that the dullness of trade is produced by some general cause, operating upon the whole commercial world. Those who insist that overproduction is responsible for the trouble seem to forget two important considerations: One is that the producing capacity of the world was not too great for the demand two years ago, and that there has been no increase of it not largely warranted by the natural growth of wealth and population. The other is that the whole product of the industries is now actually taken and consumed by the people. The prices are low and the movement of goods is sluggish; but the fact of the consumption of the product is simply unquestionable.

What, then, is the matter? We venture to offer here an attempted explanation of the difficulty, which the reader may accept or reject, as he pleases. We give it for what it may be worth, without asserting its infallibility, but with a reasonably strong conviction that it is correct.

There are in this country about ten million men. Every man is a buyer and consumer, and the majority of them buy for others who are dependent upon them.

Now, if each man of these millions buys, in any year, just a little less than he has been accustomed to do, that makes the difference between active trade and dull trade. A small bit of individual economy multiplied ten million times becomes a crushing force upon national industry. If, for any cause, a feeling of apprehension is started in a community, it spreads with the rapidity of lightning over the country and the world. The movement is like that of a feeling of panic in a crowd. It is felt everywhere at the same moment. Precisely this thing happened not many months ago. The result was that men with capital became cautious. They refrained from new enterprises, and there was an instantaneous check put upon multitudes of large ventures. As the feeling grew stronger, conservatism in expenditure became the rule in nearly everything; the demand for material slackened;

this was followed by the loss of wages among large classes of wage-earners. As a result, the demand for products decreased, and, when it did so, other wage-earners were compelled to reduce their purchases, and so there was action and reaction upon one industry after the other, until all were affected. And this same process went on in other countries with similar results, the relations between all civilized countries being so close that each feels a shock applied to the industry of another.

The cause from which we are suffering now, the afore, may be called want of confidence, or nervousness or apprehension, or by any one of half a dozen other names. The consumers are here, with the same wants that they have always had, and there is just as much money and just as sound a condition of trade methods as there ever was; but the situation bred by timidity in its turn breeds timidity, and there will be no improvement until confidence begins to be restored. Just as soon as men begin to pluck up courage and to engage their money boldly in new undertakings, a stir will be felt in all the industries, and the renewed activity will increase the feeling of confidence with accumulative force. The good times will come again as swiftly as they departed, and we may venture to predict that they are not very far distant.—The Textile Record.

**REMARKABLE TRICYCLING.**—For 15 years the city weigher of Salem has suffered with paralysis in both legs, making it impossible for him to walk unaided, or to lift his legs, and even with the aid of a crutch it was exceedingly hard to drag himself along. As an experiment, he was advised to try tricycling. Incredible as it may seem, he became a tricyclist, and can propel his machine as well as many who have the perfect use of their legs. He has the sufficient strength to push down upon the pedals, and as one pedal goes down the other pedal lifts the other leg. He rides his Columbia tricycle to and from his office daily, and has ridden all over the city, attracting great attention, for he is one of the old pioneer ship captains of Salem, and is personally acquainted with almost everybody in the neighborhood. Recently he made a trip to Swampscott on his tricycle, a distance, out and back, of eight miles, but he was assisted by a bicyclist, who, connecting the bicycle and tricycle by a rope, towed him part of the distance. The city authorities contemplate erecting a little house for the machine near his office.—Boston Herald.

**CORRESPONDENCE** relating to the manufacturing, mining, lumbering and all other material interests of the Southern States is solicited. We invite those interested in the development of the South to make free use of our columns. Reaching so many capitalists in all parts of the United States seeking profitable investment in the South, the MANUFACTURERS' RECORD offers an excellent chance for the people in that section to place the advantages of each locality before those likely to be interested. We will take great pleasure at all times in telling what has already been accomplished in the South, and showing up the opportunities of doing still more,—so if you desire to attract immigration or capital, or if you know of an opening for profitable investment in manufacturing, mining or kindred pursuits, write us an account of it. It will be published free of cost.

# CONSTRUCTION DEPARTMENT.

We publish, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

F. A. Crary, of Pantego, N. C., can give particulars of a shingle mill to be put up at Broad Creek in that State.

The Acme Manf. Co., of Wilmington, N. C.,—Cronly & Morris, agents,—will double capacity of their factory at Cronly.

Jerry Johnson, Louis Emmitt and others at Fayetteville, N. C., have organized foundry and machine shop firm.

The Clifton Cotton Mill, at Clifton, S. C., will add 3,000 spindles.

Burk & Co., Lapidum, Md., are opening granite quarry.

Henry House, near Ackworth, Ga., has sold a gold mine on his farm for development.

Wm. L. Noland, Brucetown, Va., will put new roller-process machinery into his flour mill.

The Pacolet Manf. Co., Pacolet, S. C., will add 2,000 spindles shortly.

Mr. Lewis is putting up a chair factory at Cleveland, Tenn.

The Cleveland Woolen Mills, Cleveland, Tenn., are putting up an additional building.

Chas H. Phinzy, Stewart Phinzy, Jacob Phinzy and J. J. Cohen, all of Augusta, Ga., have organized a cotton manufacturing company, to be known as The Algeron Mill; capital \$100,000.

Reported that a \$30,000 brewery is to be erected in Birmingham, Ala.

J. M. Lachlan, superintendent of the United States and Brazil Mail Steamship Line, New York; Cramp & Son, of Philadelphia, and others, contemplate the establishment of an extensive dry dock and shipbuilding yard at Newport News, Va.

The Michigan capitalists who were reported as having decided to build iron furnaces, &c., at Calera, Ala., have for some unexplained reason cancelled their contracts and abandoned all their proposed enterprises.

Only \$4,000 is lacking for the organization of an Edison Electric Light Co. in Knoxville, Tenn.

The Main Jellico Mountain Coal Co., of Jellico, Tenn., the organization of which was lately reported, has elected as officers: B. R. Hutchcraft, of Jellico, president and general manager; Marcellus E. Thornton, of Atlanta, Ga., vice-president; Geo. W. Denison, of Atlanta, secretary and treasurer; and James W. Fox, of Jellico, superintendent. Capital \$500,000. Are building a railroad, a saw mill, and preparing to open their mines on a large scale.

The Coal Creek and New River Mining Co., of Coal Creek, Tenn., has been organized by John Chumbra and Robert Donaldson, of Coal Creek, and John M. Brooks, Hector Coffin and Wm. M. Ashmore, of Knoxville, Tenn. Have already commenced work; are now making contracts for heavy mining operations this fall.

Prospect of an ice factory in Durham, N. C.

The Virginia Nail & Iron Works, Lynchburg, Va., have been incorporated; capital, \$100,000. J. H. Adams, president; T. C. Jones, general manager; and R. H. F. Adams, treasurer. This company will operate the nail and iron works lately owned by Mr. A. H. Leftwich, who is interested in the new company.

Benj. Gordan is erecting a furnace at a tin mine on Irish creek, Rockbridge county, Va.

J. F. Woodward, of Burnet, Texas, and M. F. Hume, of Jackson, Miss., will build jail at Burnet, Texas.

The flour mill company previously reported as organizing at Comanche, Texas, has been incorporated as the Comanche Roller Mills Co.; capital, \$20,000.

The Sulphur Mine Shaft Construction Co., capital \$250,000, has been organized in New Orleans, to work sulphur mine at Calcasien Parish.

Work will soon be commenced on the large hotel to be built at Lake de Funiak, Fla.

Contracts will be invited for grading the Sylvania Railroad, office at Millen, Ga.

A cotton-seed oil mill will probably be put up in Alvarado, Texas.

It is reported that a hat factory, paper mill, and a cotton and woolen mill, will be erected in Lampasas, Texas.

R. D. Cole & Co., Newnan, Ga., are building a \$4,000 flour mill in Asbury, Ga., for W. C. Lee.

Burket Atkinson, of Senvia, Ga., will move one of his saw mills.

Fuller & Iverson are putting up new saw mill near Turin, Ga.

The North Street Methodist Church, Nashville, Tenn., will erect new building.

Henry Record & Son will prepare to rebuild their flour mill at Fallston, Md., lately burned.

A R. Altmyer, Savannah, Ga., will erect large four-story iron-front warehouse.

E. J. Fuller, of Gardner, Mass., and others, will start a chair factory at some place in Georgia.

Charles Martin, Martin's Roads, Calhoun county, Ala., will put up cotton gin and flour mill at Lincoln, Ala. Has already purchased part of machinery.

It is reported that H. P. Lamb, of Crawford, Pa., and others, will develop coal mines in Arkansas.

A glass factory, to cost about \$20,000, is to be erected at Morrilton, Ark. S. F. Speer can give particulars.

A \$25,000 court-house is to be built at Llano, Texas, at once.

J. R. McCallum, Knoxville, Tenn., will erect an extensive four-story bank and office building.

McDuffie & Son's saw mill, at Keyser, N. C., was not injured by boiler explosion, as first reported, but by lightning, which struck the smoke-stack, killed several men, &c.

Sir Titus Salt, Mr. Chas. Stead, of Saltair, England, and Wm. Donaldson, of Glasgow, Scotland, have decided to erect two blast furnaces on their mineral lands, at Dayton, Tenn., near Chattanooga; capacity, 250 tons a day. They will spend over \$500,000.

The Gallatin Cotton Mills, Gallatin, Tenn., will undergo general repairs this summer.

Smith & McGaffie, Luling, Texas, are pushing along in building their planing mill.

J. M. Siddall, of Anderson, Texas, contemplates putting up a steam gin and mill.

Prospect of a flour mill in Breckenridge, Texas. W. F. Marberry can give particulars.

The Parker County Mills, Weatherford, Texas, are being overhauled and roller-process machinery put in.

A cotton mill company is being worked up in Gainesville, Texas. A. E. Dodson or R. D. Gribble can give particulars.

Nearly \$12,000 has been raised to build a hotel in Statesville, N. C.

A furniture factory will probably be built in Mobile, Ala., by Western men.

A. H. Moses, president of the Sheffield Land, Iron & Coal Co. of Alabama, (post-office Tusculum, Ala.) can give particulars of the proposed water works, gas works, iron furnace, &c., to be built by this company at the new town of Sheffield.

Jos. Hobgood, Tarboro, N. C., will rebuild foundry and shops burned last year.

Padgett Bros., of Lynchburg, Va., have decided to establish a tobacco factory in Hickory, N. C., as previously rumored a short time ago.

Pensacola, Fla., is discussing the advisability of establishing water-works.

The Jefferson County Hotel Co. will build a hotel at Monticello, Fla.

Dr. — Bond, of Lithonia, Ga., will probably build a \$10,000 flour mill at Dallas, Ga.

Love & Hartridge are building a \$15,000 planing mill at Austed Junction, Ga.

U. B. Wilkinson, Newnan, Ga., will rebuild paper mill dam and commence manufacturing paper.

G. W. Smith will put up saw mill at Franklin, Heard county, Ga.

A \$40,000 hotel and a \$63,000 court-house are to be built at Colorado, Tex.

Proposals are invited till May 31, by H. A. Whiting, Fairmont, W. Va., for the grading and masonry work of ten miles of the Fairmont, Morgantown and Pittsburgh Railroad.

The buildings for the Victoria Burnham Grate Co., of Birmingham, Ala., previously reported, will be commenced very soon; capital \$'00,000. Will manufacture grates, mantels, stoves, hollow ware, &c. F. W. Siddons, H. M. McNutt and J. H. Burnham committee in charge.

Starr & Co. of St. Louis will build a \$13,000 jail at San Saba, Texas.

An electric light company is being worked up in Waco, Texas.

Washington county, Texas, will build a \$60,000 court house.

A \$25,000 school house is to be erected at Henrietta, Texas.

## BURNED.

Saw and grist mill, gin, &c., of Charles Scott, Rosedale, La.; loss, \$7,000.

Mill of Norfolk Knitting and Cotton Factory damaged \$10,000 by fire.

Mills of Kentucky Lumber Co., at Williamsburg, Ky.; loss \$60,000.

The saw mill of Geo. N. Williams, at Coalton, Ky., was wrecked by boiler explosion.

Saw mill of A. W. Nelms, near Zuni, Va.

Tobacco factory of Mitchell Brothers, Nicholasville, Ky.

Mill of P. Clemmer & Co., on the South Fork River, in Gaston county, N. C.; loss, \$3,000.

Machine shops of Samuel G. Taylor, East Falls avenue, Baltimore, damaged about \$6,000 by fire.

J. S. Gosnell & Co.'s furniture factory, Baltimore, damaged by fire; loss about \$4,000.

Tryon City Spoke Factory, Tryon City, N. C.; loss \$4,000.

Morrison & Woodward's planing mills, and some adjoining buildings, Chattanooga, Tenn.; 1 ss \$50,000.

## Philadelphia Manufacturers.

Manufacturers generally take a hopeful view of the situation, but are buying for pressing requirements only; the inducements offered to purchase stocks and material for future use do not sufficiently overbalance the risks to justify any departure from their present conservative policy. The present is the dull season in nearly all branches of trade, and the manufacturers are waiting for the expected revival of trade in June. They express gratification at the favorable disposition made of tariff agitation at Washington; have but little apprehension of unfavorable effects on business from Wall street failures, and look forward to a quiet and steady trade. The volume of daily business is not heavy, but steady; and, under the circumstances, satisfactory prices have reached bed rock. There is no speculative movement in trade, and no inducement to crowd stocks upon the market or to accumulate them in manufacturing and warehouses. A very fair percentage of Philadelphia manufacturers are working full time, and, in all cases, the market requirements are being kept steadily in view. Buyers generally do not look for any further weakness in prices.

Leading iron manufacturers report matters rather quiet, but are satisfied that the causes at work beneath the surface of the trade will bring an improvement in due time. They regard a lockout in the West as inevitable, but do not anticipate any immediate improvement in the demand in the East, except to the extent which consumers will purchase as a matter of ordinary business prudence. Buyers have all along been running on extremely low stocks, and the activity expected will be to correct this condition and carry moderate stocks. The manufacturers are not in accord as to the probable outcome of the lockout; some express the opinion that the employees will be defeated, as they always have been; others think that the Amalgamated Association will be split.

The manufacturers of agricultural machinery and implements, flouring mill machinery, drilling machines, die cutters and hydraulic and pneumatic machinery are working from one-half to two-thirds capacity; manufacturers of iron working machine tools, of wood-working machinery, shafting and gas generating machines are able to report a creditable degree of activity, fair orders and good prospects for the summer. There is, however, less work booked ahead for delivery than is usual at this season, except among the wood-workers, most of whom are well supplied with business.

The manufacturers of elevators and hoisting machines, numbering nine, are, for the most part, doing well.

Clem & Morse, 413 Cherry street, have several orders on hand; Stokes & Parrish, Thirtieth and Chestnut, are running their usual force.

The makers of brick machines have been delivering considerable machinery, and have several weeks' work on hand. The brick makers are having a busy time in meeting rushing orders for building requirements—Philadelphia Press.

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Office, 65 Westminster St., Providence, R. I.

Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old.





### Silver-Plated Table Ware.

The Wm. Rogers Manufacturing Co., of Hartford, Conn., has nearly reached its twentieth year under its present name, having been established in 1865, though it is in reality much older, as it is the immediate successor of a firm established many years before that date. The original firm of Rogers Bros. was composed of three brothers: William, Asa and Simeon Rogers,—William being the senior and the founder of the Wm. Rogers Manufacturing Company. The steadily increasing business of this company since first organized is sufficient proof of the durability of the goods turned out. During all the years of their successful career, they have maintained the same high standard of plate which the company adopted at the commencement of business, and at the same time have adhered to their rule to "sell all goods of our manufacture as low as possible for first-class goods." The silver ware bearing the well-known trade marks of this company is guaranteed to be as represented.

We present two illustrations of table ware as a sample of the beauty of design and finish of their goods. Illustrated cata-

### Probable Effect on Southern Lands, of the Low Prices of Grain.

Every indication warrants the hope that within a few years many of our people who to-day are somewhat sympathetically designated as "land poor," will become millionaires. The old causes that have led to prevailing low prices in the Southern land market are fast passing away, and at the same time unexpected events, that are certain to operate in favor of an increased demand, are daily transpiring.

In the first place, the failures that were brought about by a false system of agriculture—all cotton and imported supplies—and which caused millions of acres to be forced upon the market, are decreasing in number with the progress of diversified farming; and then, too, the marvellous increase in our manufacturing industries and the development of our mineral resources have had a good effect on the price of real estate.

The low rate of interest that money is now commanding in the East likewise gives augury of better prices. But the present collapse in the prices of the products of the prairie regions will perhaps

a quarter, is now down to 77 cents at Chicago, while provisions are almost correspondingly low.

Says Bradstreet's of April 5th:

Until this year dollar wheat in Chicago has been considered safe enough for the most prudent investor. The dollar was considered the bottom price, and any quotation below that figure was sure to excite sufficient buying to put prices back at once. Now a change is chronicled, and the prediction is that values from 15 cts. to 20 cts. under the dollar must be looked for, and operations computed accordingly. The ground for this belief by grain men is that Liverpool fixes the market figures, and on that calculation 85 cts. is named as the new standard. Here arises the problem of the cost of transportation to the market, which must be counted as part of the cost of production. The railroads cannot earn a profit at the present carrying rates, and the growers cannot make it pay to raise the cereal at the existing value.

Mr. Gould is the authority for the statement that in time America will consume all the wheat she produces. He might have explained how the country would get on in the meantime, but he did not. The machinery of transportation, including not a little in which Mr. Gould himself had large interests, will be in operation, and what will be done to keep it going? It is the through business of the roads that traverse the wheat growing regions that makes them pay. No one pretends to say that they could pay the substantial dividends that the stockholders look for from the local business alone. There are some properties under such conditions that would not be able to pay operating expenses and keep up fixed charges. Of course high-priced wheat elsewhere would work a change that would dispel the difficulties here. Failure in crops, devastation in some form or other, or war in the other wheat-producing countries to shut off the supplies, would produce the same result. These are contingencies that cannot be counted on. Railroads must be run and business generally must be done more on probability than possibility. As has been said, the present rates no more than pay the cost of carrying, if they do not, taking everything into consideration, entail an actual loss.

Now, in order to save themselves in the emergency above outlined, the railroads will be compelled to raise rates. This cannot be done at the cost of the consumer, because the standard of grain prices is fixed at Liverpool. So it must come out of the pocket of the Northwestern farmer, who, from present probabilities, may as well make up his mind to stand even a further reduction of profits. But, some one may say, the Northwestern farmers have only to reduce the acreage and the price of wheat will go up again. Alas! we of the South know from sad experience the utter futility of such a hope. Has not line upon line and precept upon precept been sounded into our ears with a view to a decrease of the acreage in cotton, and all absolutely without avail!

The truth is the Northwest is now just entering the same school from which the South is about graduating—a school whose chief lesson is that certain disaster will result from the one-crop plan. We have learned the folly of all cotton, the Northwest must learn the folly of all grain. True, this evil is not so universal there as it has been here; but then, the reader responds that our soil and climate give to diversified agriculture throws the advantage largely in our favor at this stage of the game. And our people have but to follow up this advantage in order to turn the tide of prosperity into the South and cause our lands to command prices commensurate with their intrinsic value.

Let not our brethren of the prairies understand us as exulting over their mis-

fortunes. So far from such being the case, we would give them assurance of our heartfelt sympathy. We are, however, powerless to help them, except by increasing our purchases of their products, which we can no more afford to do than the people of Pittsburg, Pa., can afford to import their iron from Birmingham, Ala. And, moreover, we confess that we would rather have wheat down to 77 cents than cotton down to 7 cents. But after all, the Northwest ought to feel very grateful to us, for has not our consumption of its meat kept the price of corn up to 45 cents? We cannot promise, however, to continue even this assistance, for we hope by next year to be able to raise all our supplies. While grain and provisions thus go a-begging in the markets, our great staple is enjoying sharp advances, and if prices can be maintained, such of our planters as are not handicapped by debt, nor given over body and soul to the all-cotton error, can make money by raising it. But this brings us back to the merits that investors will soon begin to discover in Southern lands.

The fact that most of the habitable, and, at all events, most of the arable area of the United States outside of the South is fairly well settled, has for some years been attracting more or less attention to our lands, but not a tithe of the attention they deserved. Now, however, in view of the gloomy outlook in the Northwest, and the vast amount of idle capital at the East, and the hundreds of thousands of immigrants that annually seek new homes, the South cannot fail to step in and up while the Northwest steps down and out.

Capitalists cannot long be expected to lend money at from 1½ to 2% so long as lands are purchasable here that can be safely relied on to bring in an immediate return of 20% or more on the investment, without taking into consideration the fact that their value must, in the nature of things, continually increase.

Referring to the low rate of interest in New York, Bradstreet's observes: "Money is still abundant at 1½ to 2. The time cannot be recalled when it rated at 1½ on April 1st before." The truth is the financial centres of the world are to-day groaning under the load of unemployed capital, and the owners of that capital are scanning the universe for investments, and the South offers by long odds the most favorable field.

In view of these things, it behooves our land-owners to make every sacrifice to hold on to their acres. Let the selling of land for a song, in order to get a little ready money, be stopped, and that at once; for it is our belief that inside of a year from to-day lands in many localities that now go begging at one dollar will be sought for at two. Every indication points to this result, unless some unforeseen disaster creates a universal panic—a calamity that even the darkest side of the financial picture fails to foreshadow.—Planters' Journal.

The Clark & Granger Manufacturing Company, Detroit, Mich., an organization composed of some of the most prominent capitalists and steamship owners of that city, are fitting up works on an extensive scale for the manufacture of their several specialties, which, if we are not misinformed, will be of an interesting character to all steam users. A special feature will be the building of compound marine engines, under the direct supervision of Mr. Harry W. Granger, one of the best known and most skillful mechanical engineers in the lake region, who has designed and superintended the construction of many of the best compound engines on the lakes, as well as some famous engines for city water supply. Mr. Granger has recently visited the eastern machinery markets, and we learn that the successful competitors for supplying the whole outfit of machine tools, such as heavy planers, lathes, shapers, drills, &c., also the shafting, hangers, pulleys, and, we believe, the small tools also, were the well known extensive dealers in machinists' supplies, Manning, Maxwell & Moore, 111 Liberty street, New York.



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logues showing the various kinds of goods manufactured, the prices, &c., can be obtained free, by addressing the Wm. Rogers Manufacturing Co., P. O. Drawer 30, Hartford, Conn.

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Persons arriving in New York via Cortlandt Street Ferry, by taking the 6th Avenue Elevated Train, corner Church and Cortlandt streets, can reach the Grand Union Hotel in 42d street, opposite Grand Central Depot, in twenty minutes, and save \$3 carriage hire. If en route to Saratoga or other summer resorts via Grand Central Depot, all baggage will be transferred from hotel to this depot free. 900 elegantly furnished rooms \$1 and upwards per day. Restaurant the best and cheapest in city. Families can live better for less money at this hotel than at any other first-class hotel in the city.

CINCINNATI is probably better supplied with good hotels than any other city of its size in the United States, and one of the best of them is the Palace Hotel, corner Vine and Sixth streets. Under its new management it has grown wonderfully in popularity, and it has a constantly increasing patronage. Travelers will find it about all that is to be desired in the way of a first-class hotel.

do more than anything that has occurred for a long, long time, to turn Southward the tide of immigration and capital and thus increase the demand for Southern lands.

The Northwest for twenty years has been the recipient of this tide of men and money, and prosperity has smiled upon the settler, while the capitalist has hitherto had no reason to complain of his returns. But during all that time the price of grain and provisions has been kept up to an abnormally high figure, by reason of an artificial demand both in Europe and here in the South, several thousand millions of Southern money having gone to help swell the profits of Northwestern farmers, every dollar of which served to "bull" real estate there and to "bear" real estate here at home.

Now, however, partly because the South has ceased, in a measure, to consume Northwestern products, and partly because European markets are beginning to be supplied from other fields, the bottom is about to drop out of the Northwestern boom; and money and capital en route thither have at last called a halt. Wheat, that has always heretofore been considered dirt cheap at from a dollar to a dollar and



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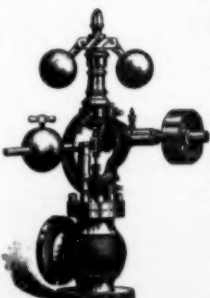
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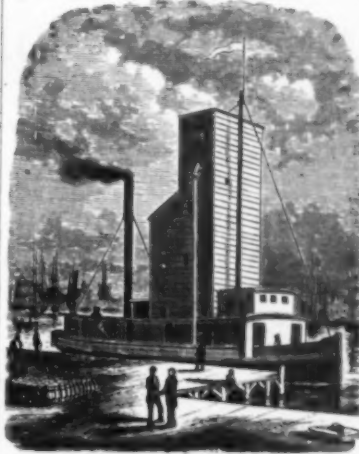
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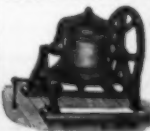
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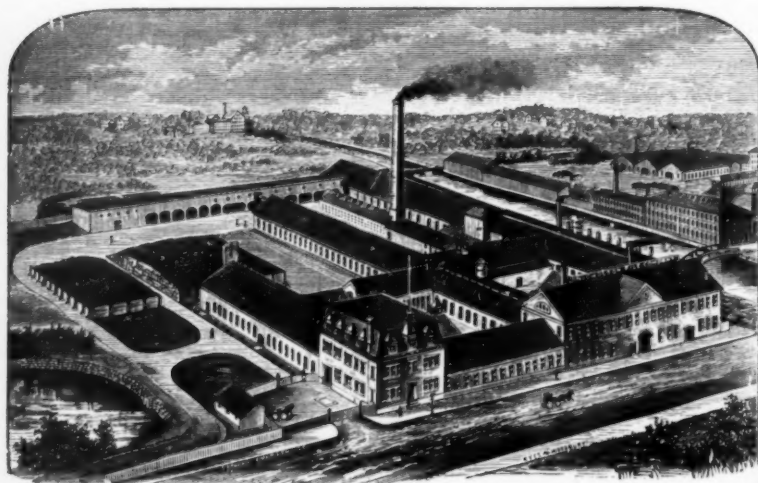
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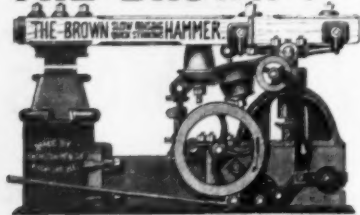
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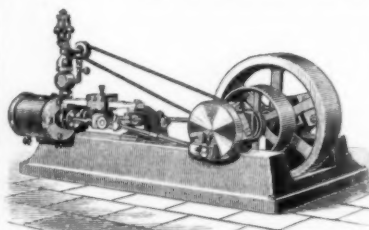
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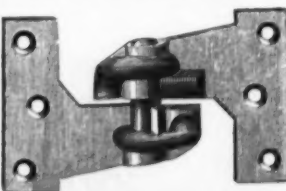
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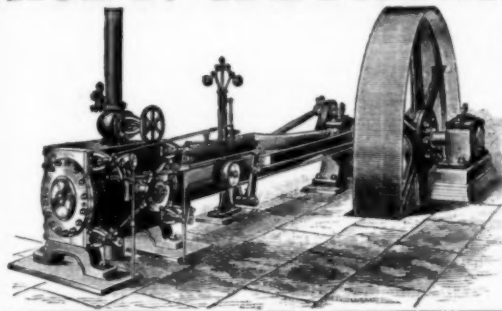
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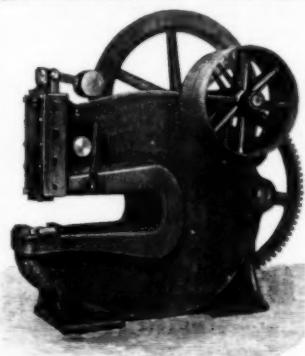
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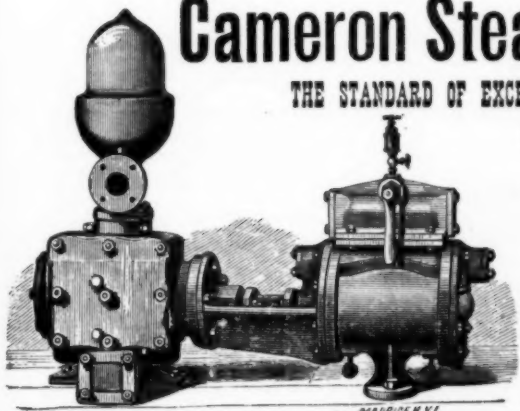
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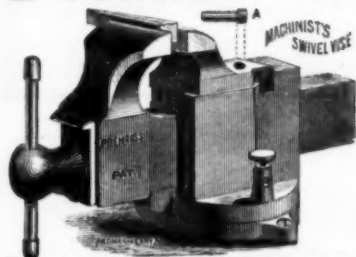
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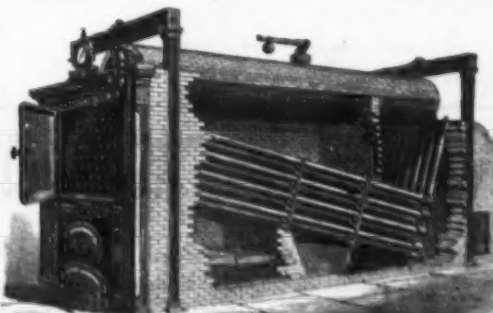
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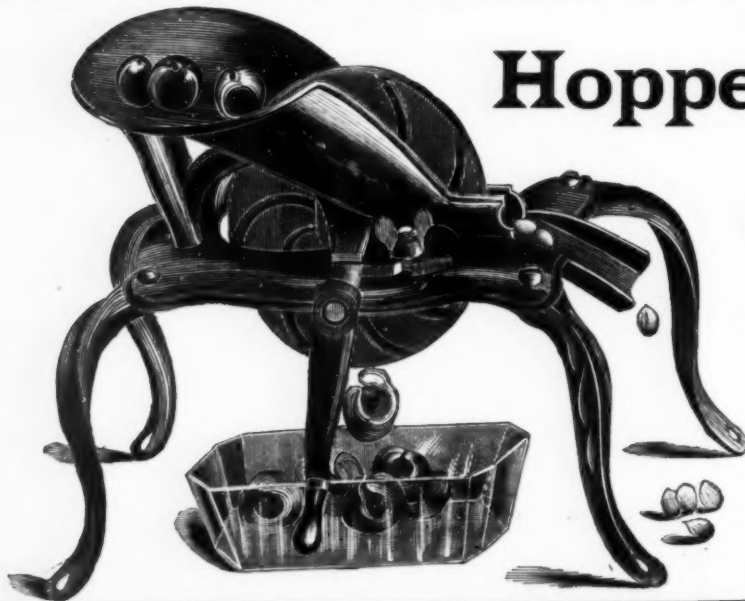
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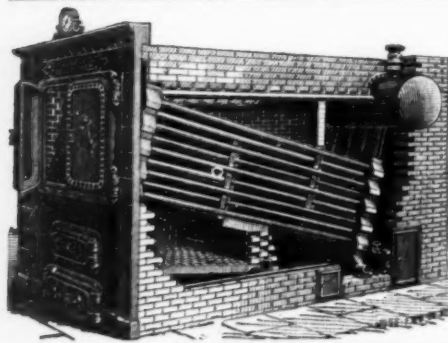
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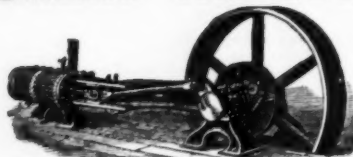
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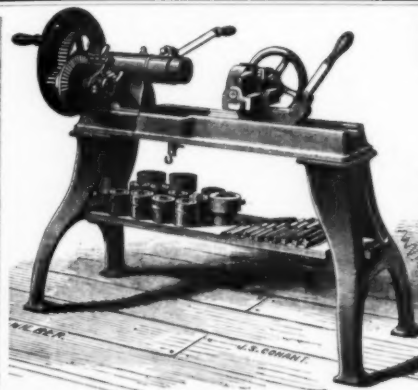
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Bailley's (Stanley R. & L. Co.) new list, Jan. 1883.....dis 30		Stanley R. & L. Co. new list, Jan. 1883.....dis 30	Plane Irons, Butcher's.....\$5.50 to 2	Universal, XX, No. 16.....dis 40		Blue Prussian, fair to best.....40.00	
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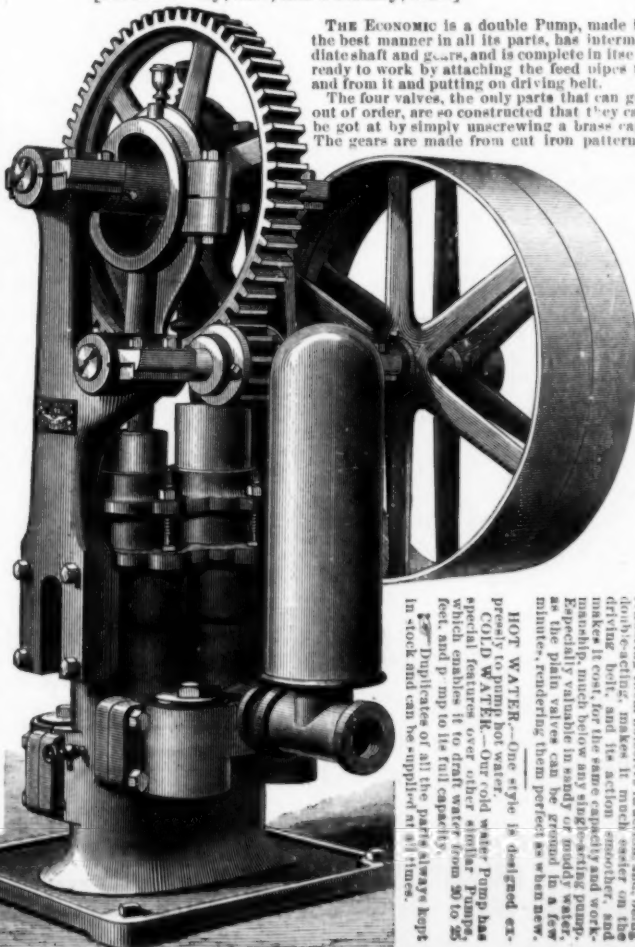
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FOR DOORS FROM 1/2 INCH TO 1 1/2 INCHES THICK, IN PLAIN AND FANCY FINISH.

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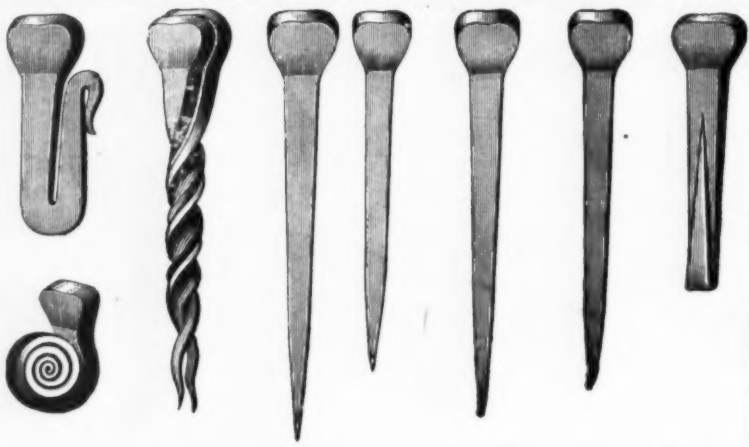


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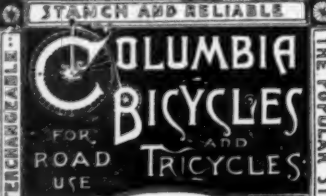
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- 1 " " " " 22 in. x 8, 10, 12, 14 and 16 ft.
- 1 " " " " 24 in., any length of bed to 26 ft.
- 1 " " " " 26 in., " " " " 26 ft.
- 1 " " " " 28 in., " " " " 46 ft.
- 1 " " " " 28 in., " " " " 26 ft.
- 1 " " " " 30 in., " " " " 26 ft.
- 1 " " " " 30 in., " " " " 29 ft.
- 1 " " " " 42 in., " " " " 24 ft.
- 1 " " " " 48 in., " " " " 24 ft.
- 1 " " " " 15 in. x 4, 6 and 8 ft. Rod feed only.
- 1 each, Turret Lathes, 13 and 14 in. x 14 in x 6 ft.
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- 1 each, Hand Lathes, 10, 12, 15 and 18 in. swing.
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- 1 Iron Planer, 24 in. x 24 in. x 6 ft.
- 1 each, Iron Planers, 26 in. x 26 in. x 7 and 10 ft.
- 1 Iron Planer, 30 in. x 30 in. x 10 ft.
- 1 " " " " 30 in. x 36 in. x 10 ft.
- 1 each 16, 20, 22, 25, 28, 30, 34 and 38 in. Upright Drills.
- 1 each, Nos. 2, 3, 4 and 6 Spindle Gang Drills.
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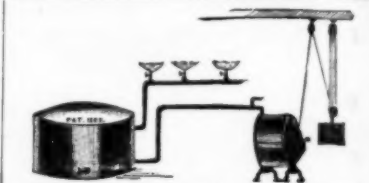
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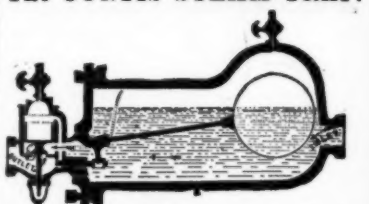
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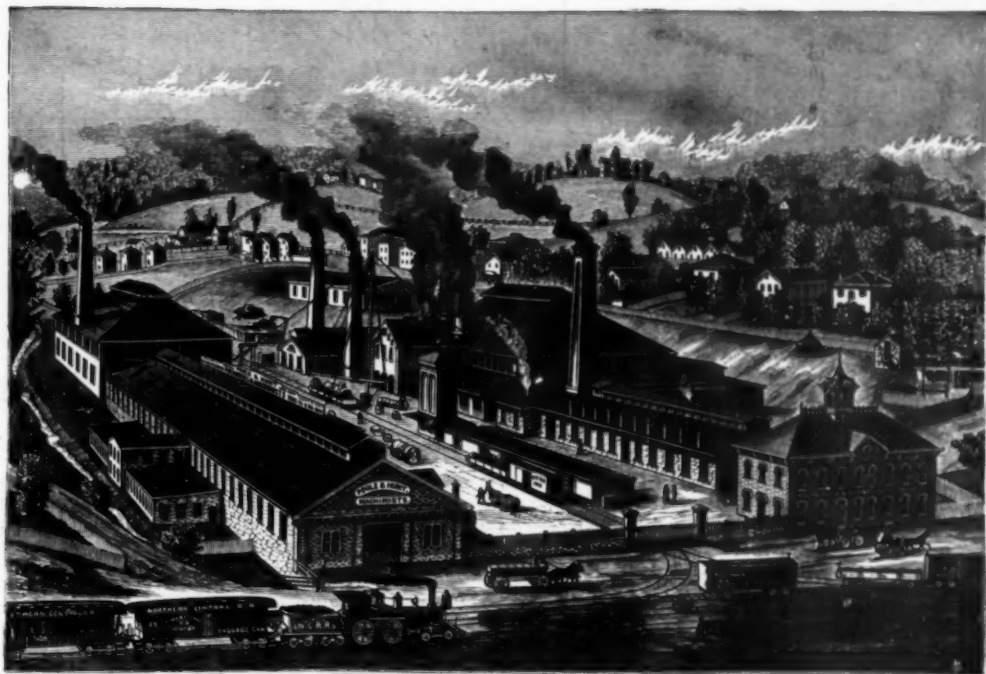


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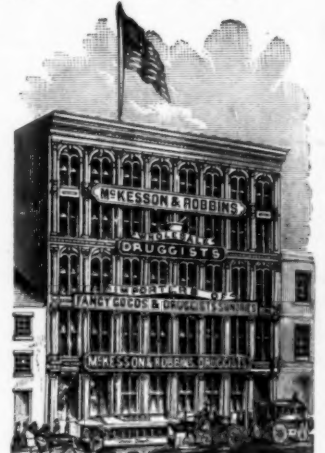
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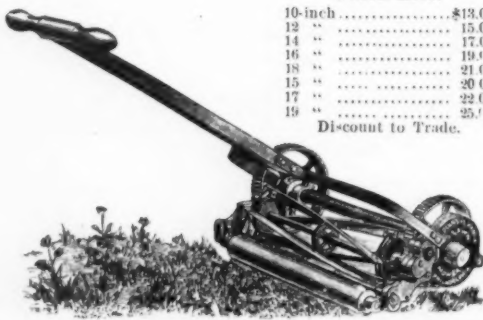
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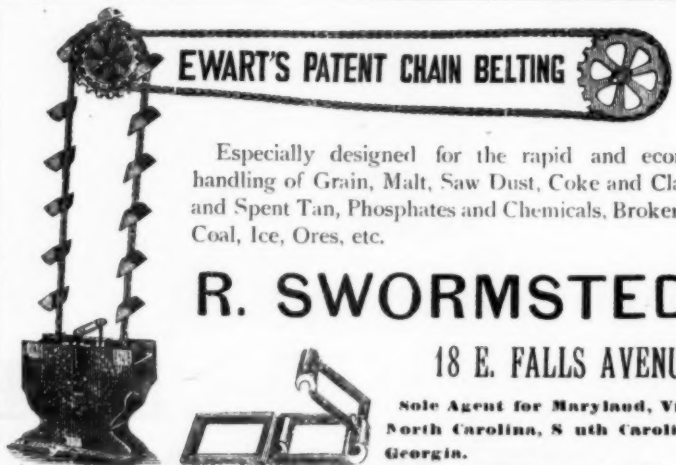
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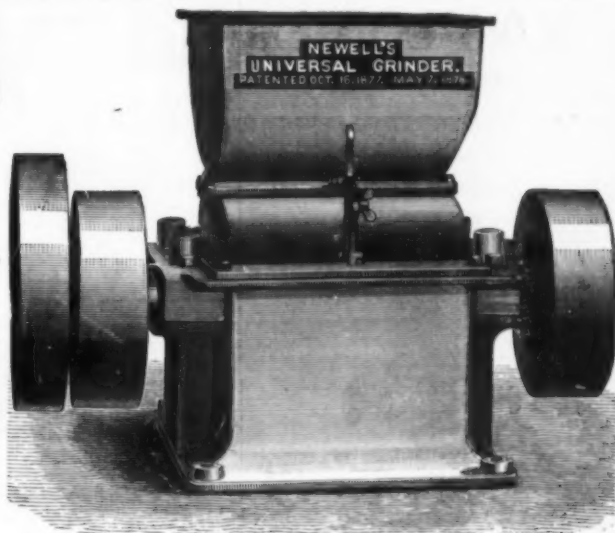
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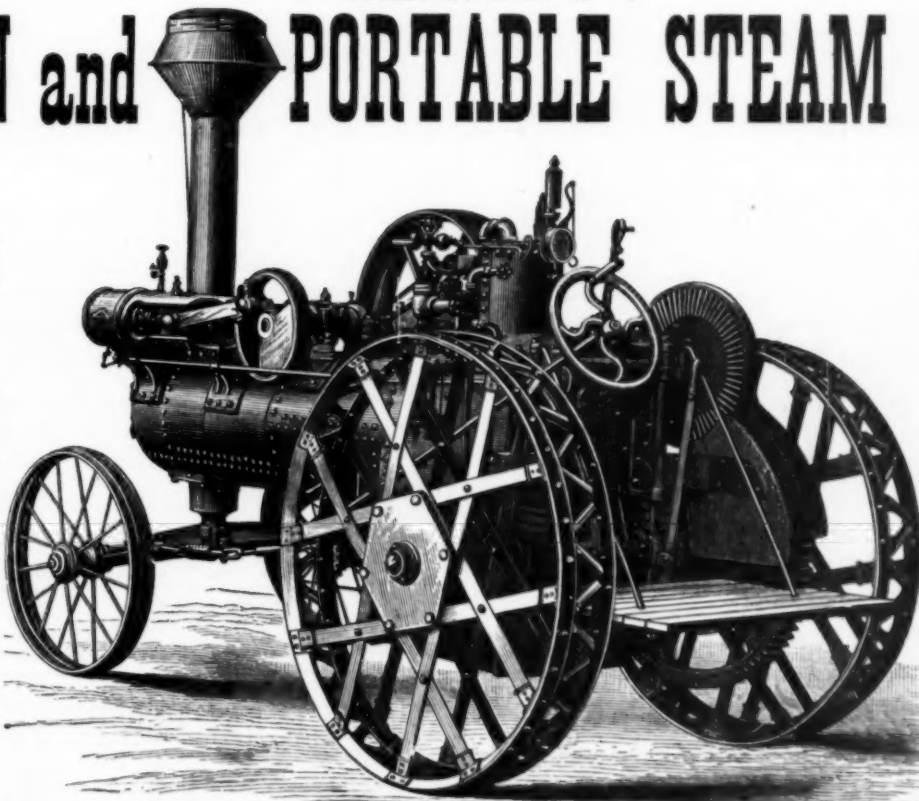
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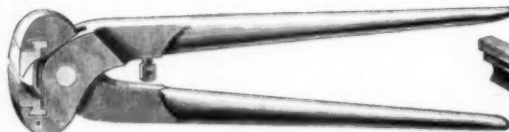
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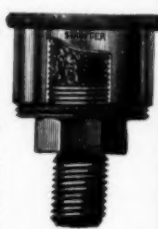
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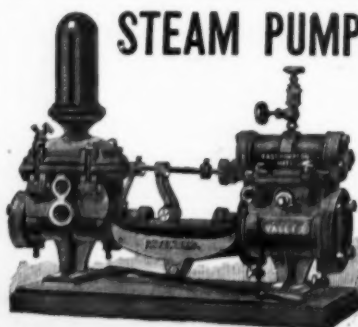
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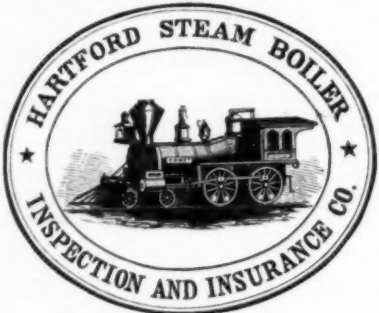
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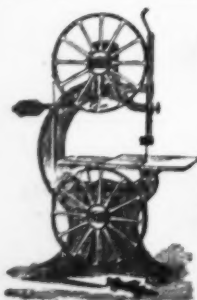
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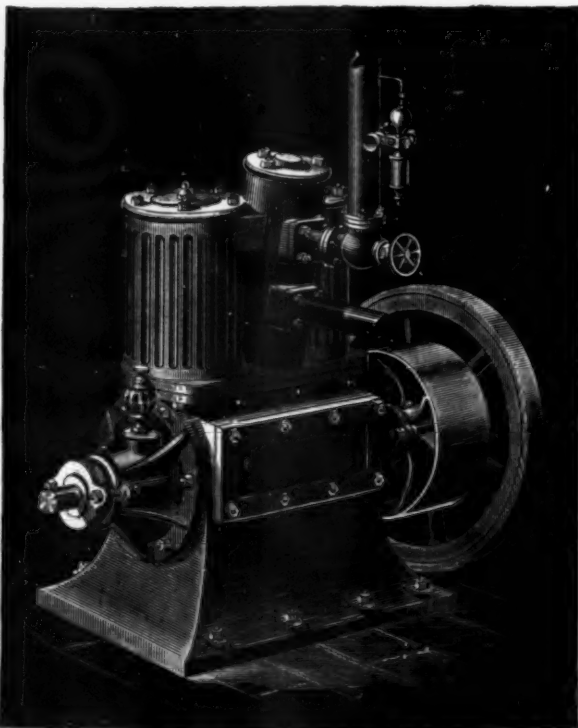
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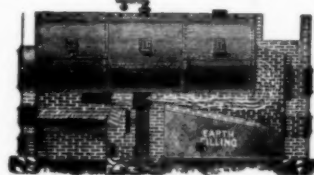
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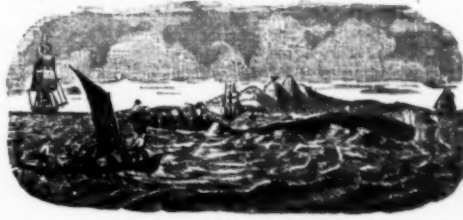
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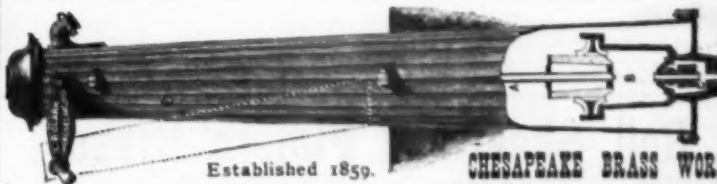
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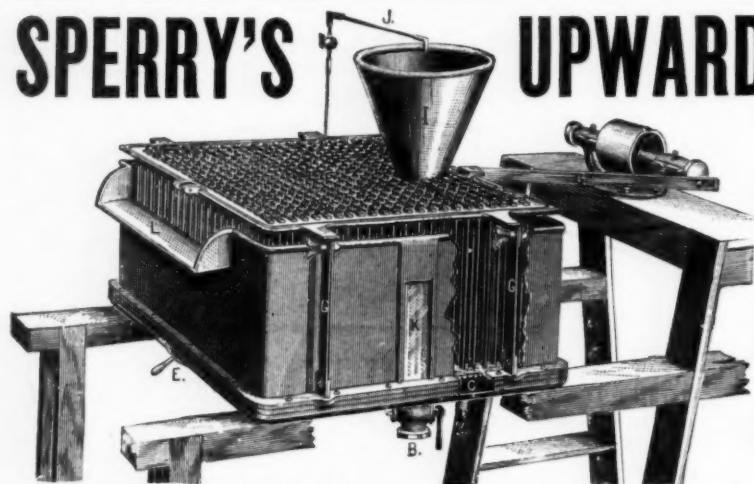
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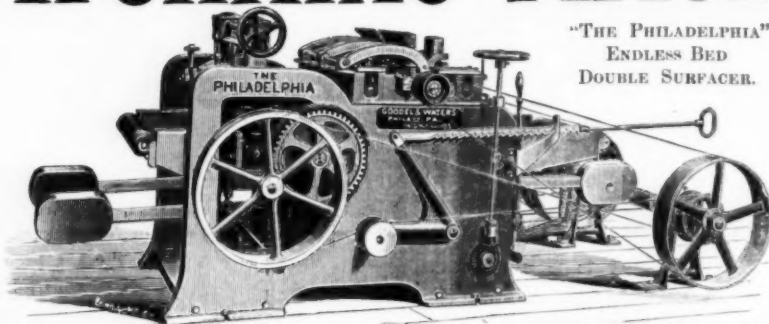
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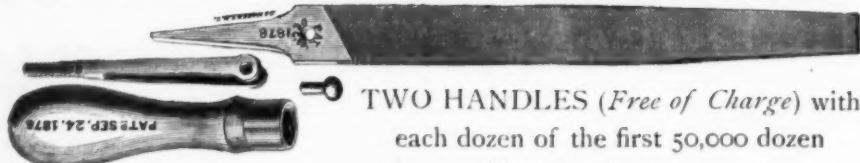
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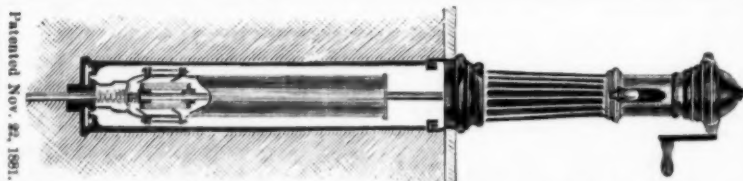
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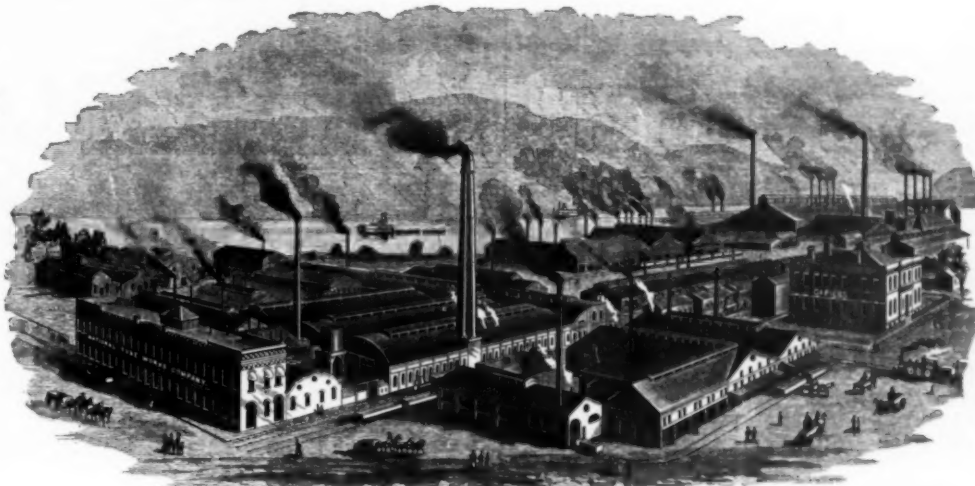
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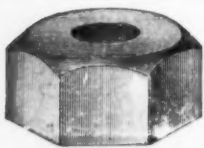
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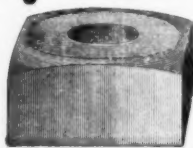
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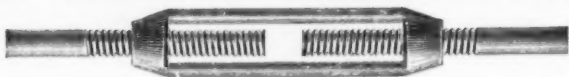
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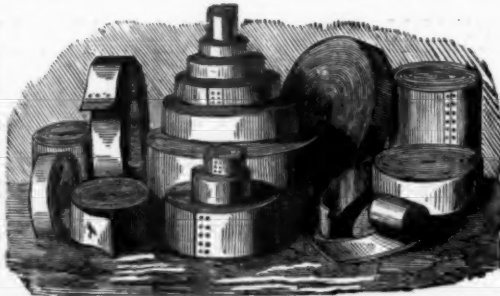
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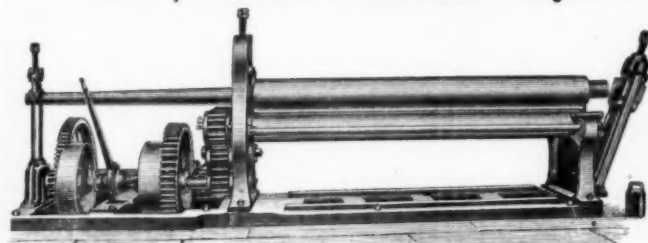
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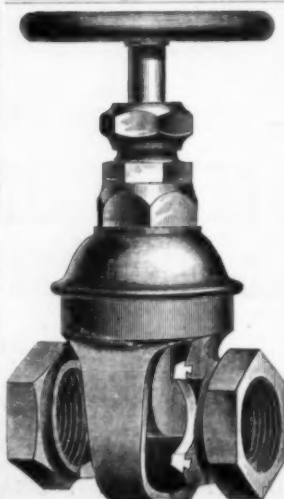
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